

“Health Courts” and Accountability for Patient Safety

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Proposals that medical malpractice claims be removed from the tort system and processed in an alternative system, known as administrative compensation or “health courts,” attract considerable policy interest during malpractice “crises,” including the current one. This article describes current proposals for the design of a health court system and the system’s advantages for improving patient safety. Among these advantages are the cultivation of a culture of transparency regarding medical errors and the creation of mechanisms to gather and analyze data on medical injuries. The article discusses the experiences of foreign countries with administrative compensation systems for medical injury, including their use of claims data for research on patient safety; choices regarding the compensation system’s relationship to physician disciplinary processes; and the proposed system’s possible limitations.

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PROPOSALS TO MOVE MEDICAL INJURY COMPENSATION from the tort system to an administrative compensation system are a hardy perennial (Kingdon 2003) in the world of malpractice reform, surfacing and resurfacing during successive periods of malpractice “crisis” (Mello 2006). Such proposals first drew serious scholarly attention in the early 1970s (Havighurst and Tancredi 1973; Keeton 1973; O’Connell 1973). Then in the late 1980s the confluence of the malpractice crisis of the mid-1980s and increasing interest in the use

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of specialized courts to grapple with complex scientific issues in litigation (Brennan 1989) led to more focused consideration of administrative compensation systems for medical injury. Paul Weiler's landmark 1991 book, *Medical Malpractice on Trial*, provided both conceptual and empirical support for the idea and helped put it on the policy agenda. Early proposals for administrative compensation envisioned statewide or national systems that would replace the tort system for medical malpractice and would be mandatory and binding for all health care providers and patients. In the mid-1990s, consortia of key stakeholders in Utah and Colorado seriously considered moving toward an administrative scheme, but later in the decade the proposals foundered as the liability insurance markets environment settled down (Mello and Brennan 2002).

During the current malpractice crisis, a new incarnation of the proposal, called *health courts*, has caught the attention of both state and federal lawmakers. The health court proposal builds on earlier work, including academic scholarship from our research group and many others, as well as the recommendations in an Institute of Medicine report (Corrigan, Greiner, and Erickson 2002). Our recent work, conducted in partnership with the nonprofit advocacy organization Common Good (Harvard School of Public Health 2005), has led to a number of refinements of the proposal: most notably, the proposition that reform should begin with small-scale policy experiments.

Two bills offering federal grants and technical assistance to those states wishing to establish demonstration projects along these lines have been introduced in the Congress (U.S. House of Representatives 2005; U.S. Senate 2005a), and similar initiatives have arisen in Wyoming, Colorado, Michigan, and Massachusetts. Much of the interest in the proposal during the current crisis derives from its perceived potential to advance patient safety goals. This article describes our thinking about what an administrative compensation system for medical injury in the United States should look like and its advantages for patient safety.

What Is a Health Court?

A *health court* is a system of administrative compensation for medical injuries. It has five core features. First, injury compensation decisions are made outside the regular court system by specially trained judges. Second, compensation decisions are based on a standard of care that is

broader than the negligence standard (but does not approach strict liability). "Avoidability" or "preventability" of the injury is the touchstone. To obtain compensation, claimants must show that the injury would not have occurred if best practices had been followed or an optimal system of care had been in place, but they need not show that care fell below the standard expected of a reasonable practitioner. Third, compensation criteria are based on evidence; that is, they are grounded in experts' interpretations of the leading scientific literature. To the maximum extent feasible, compensation decisions are guided by *ex ante* determinations about the preventability of common medical adverse events. Fourth, this knowledge, coupled with precedent, is converted to decision aids that allow fast-track compensation decisions for certain types of injury. Fifth and finally, *ex ante* guidelines also inform decisions about how much for economic and noneconomic damages should be paid.

Coverage

Some health courts proposals describe a system that covers all health care providers and patients in a particular jurisdiction or clinical area, but a preferable alternative, endorsed by our group and the Institute of Medicine (Corrigan, Greiner, and Erickson 2002), is a smaller-scale demonstration project covering only a single liability insurer or group of insurers. Insurers would join this system voluntarily, bringing with them all the institutional and individual health care providers they insure. Hospital captive insurers (self-insurance arrangements, often used by academic hospitals) would be ideal candidates for pilots, because physicians often are rolled into the hospital's insurance plan and the insured entities have a high degree of control over the insurance plan's strategic direction. Patients would join the system through their choice of provider. That is, if their provider were a participant, they would be too, after receiving adequate advance notice of the new system and their rights under it. By starting with a small number of hospitals, the demonstration could ensure that patients would be able to choose providers that were not covered by the scheme.

The demonstration project would cover medical malpractice claims only. Intentional tort claims, medical product liability claims, and mixed coverage/treatment claims against managed care organizations would remain under the jurisdiction of the tort system. Initial demonstrations could be limited to clinical areas in which the types, range, and causes

of adverse outcomes were relatively well understood and usually offer an opportunity to obtain the patient's consent, such as obstetrics and anesthesia.

The state would need to pass authorizing legislation to establish the alternative system as the exclusive legal remedy for all covered patients and providers. The statute would also specify requirements for patients' notice and consent. Patients would be notified of their provider's participation at the time of first contact or whenever they sought care from a covered provider; they also could be given information when they signed up with a health plan contracting with participating providers.

Adjudicators and the Claims Process

Figure 1 shows one possible claims process for a health court demonstration. When an adverse event occurred, the hospital would determine whether it fell within the class of events covered by the system. If it did, the hospital would be required to report the event to the insurer, notify the patient or his or her family of the right to seek compensation under the demonstration program, and inform the insurer that the patient or family had been notified. To encourage compliance with these reporting and disclosure requirements, the insurer would impose a surcharge on clinicians and/or facilities if it learned about an incident from the patient or his or her representative (e.g., through a filed claim) *before* the provider reported it. The health court itself could also be empowered to levy fines if it were apparent that a timely disclosure was not made.

The patient or family would be notified and consulted through a process similar to that of the "3Rs Program," a risk management early intervention program administered by the COPIC Insurance Company (2004). In the 3Rs Program, physicians receive communication training, and when a qualifying adverse event occurs, they consult with a program administrator and then explain to the patient or family what happened, express concern, and describe how the family's immediate needs will be met (the program offers reimbursement for short-term, out-of-pocket medical expenses and lost work time).

If the patient or family decided to seek compensation, they would file a claim with the insurer by completing a simple form describing their version of what happened. Patients would have the right to review medical records relating to the injury and also to seek legal counsel if they wished. The process would be designed to ensure that legal counsel

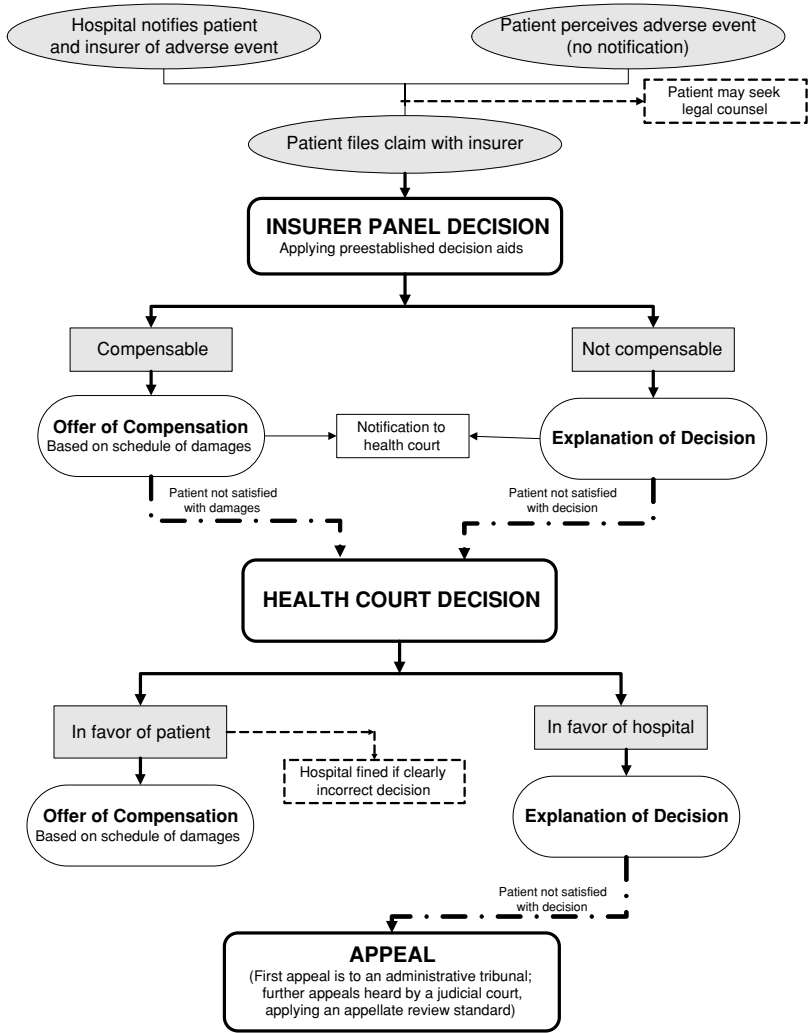


FIGURE 1. Health Court Claims Process

would generally not be necessary but it might be desirable in some cases. If the circumstances of the injury were complex, for example, counsel could explain the contested issues in a health court review or judicial appeal. Claimants would pay their attorneys on a contingent basis (i.e., only if the claim resulted in a compensation payment), but the fee would be based on a multiple of hours worked rather than a percentage of the award. For relatively straightforward claims, we expect that many

plaintiffs would choose to proceed on their own in order to avoid paying attorneys' fees. A significant advantage of the health court, relative to the tort system, is its procedural accessibility to claimants with low-value claims. Such claimants would have difficulty finding an attorney in the tort system because the expected award would not justify his or her investment in the litigation.

The first level of claim review would take place at the involved hospital or insurer. It would not be intended to be an external adjudicatory process but, instead, a formal mechanism for encouraging an expeditious settlement of claims. A group of experts convened by the involved hospital or insurer would review the event and, using decision aids, render a judgment on the compensability of the event. If the injury were deemed compensable, the insurer would make an offer of compensation. The claimant would receive a written report from the hospital or insurer that included an explanation of its reasons for the decision, and he or she would have the right to review the material used by the hospital or insurer to reach it.

Claimants who did not have legal representation would have several options for evaluating the fairness of a settlement offer: (1) making a self-evaluation, informed by opinions from family and other personal contacts; (2) obtaining a formal opinion from an attorney about the value of the case—a much less expensive option than retaining an attorney for a full panoply of legal services; or (3) requesting that the health court review the adequacy of the award. Indeed, if either the claimant or the involved health care providers were dissatisfied with the initial determination of compensability or amount of damages, a health court review would ensue.

An administrative law judge specializing in health court adjudication would review and decide the case. Health court judges would be nominated by a board of qualifications, whose members would be appointed by the state. Judges would be formally appointed by the governor (or whomever the state constitution vested with the judicial appointment power). The composition and appointment procedures for the board of qualifications are matters for state policymakers to decide but should be designed to ensure fairness and a balanced representation of the stakeholders' interests. The board should include at least one attorney, one physician, and one layperson.

The health court would review the claim *de novo* using all available materials and a process similar to that of the insurer's panel. Some claims

could be amenable to a decision on the basis of submitted materials only, but a live hearing would be held at the request of the health court or either party to the claim. At this hearing, basic but relaxed rules of evidence would be observed, similar to an administrative law hearing. Again, both parties would be permitted to have legal representation if desired, but claimants could easily proceed without the assistance of counsel in most cases. The judge would make a decision within a few weeks of the hearing, assisted by court-appointed medical experts in the relevant clinical area(s), chosen from a panel of neutral experts.

This panel of medical experts would be selected by the board of qualifications after soliciting applications from the medical community. In order to be certified for service in the health court, an expert would have to prove that he or she met the minimum state requirements for serving as an expert witness; had a current specialty board certification (for experts claiming specialty expertise); and was of good character, as evidenced by a clean disciplinary record and character references. In order to be appointed in a particular case, the expert would have to be qualified in the same profession as the defendant(s) (e.g., certified nurse midwifery if the defendant were a certified nurse midwife) and in a clinical specialty relevant to the nature of the claim and to certify that he or she had no conflict of interest with respect to the case.

The health court would issue a written explanation of the reasons for its decision. If the event were deemed compensable, the court would assess the damages. The health court's written decision would be recorded in a keyword-searchable electronic database that could be accessed by adjudicators in future cases involving similar injuries.

Damages would be paid on a periodic basis by the insurer, and either party could request that the court reconsider the amount of economic damages awarded if the patient's medical condition changed unexpectedly in the future. Either party also could appeal the decision to a higher-level administrative tribunal and ultimately a judicial court, both of which would apply a deferential standard of review (meaning that the court would give considerable weight to the tribunal's decision).

Compensation Standard

A primary goal of health court proposals is to expand the pool of injured patients who are eligible for compensation. A major shortcoming of the current tort liability system is that the negligence standard leaves many

patients with preventable injuries ineligible for compensation (Baker 2005; Bovbjerg and Berenson 2005). Because only about one in four injuries related to hospital treatment can be attributed to negligence (Brennan et al. 1991; Thomas et al. 2000), the majority of injured patients cannot access the current compensation system. Moreover, only a small proportion of those who are eligible actually file a claim (Localio et al. 1991; Studdert et al. 2000). The negligence standard also is notoriously unclear (Bovbjerg and Berenson 2005), and in practice, plaintiffs prevail in medical negligence claims only relatively infrequently (Baker 2005; Studdert et al. 2006).

To address the undercompensation problem that arises from these circumstances, health court proposals are based on a compensation standard of avoidability rather than negligence. Avoidable adverse events are injuries that are (1) caused by treatment (or the omission of treatment) and (2) should rarely, if ever, occur when care is provided according to best practice (Tancredi and Bovbjerg 1992). The avoidability standard occupies a middle ground between the standards of strict liability (in which all injuries caused by treatment are compensable) and negligence (in which only those events caused by provider fault are compensable) (Studdert et al. 1997).

A clinical example helps illustrate the difference between avoidability and negligence. Many patients are allergic to latex and at risk of an anaphalactic reaction from contact with latex gloves. Consider a patient who arrives at a hospital emergency room unconscious, unaccompanied by family, and in need of emergent surgery. Suppose that the patient has been treated at that hospital before and has a latex allergy documented in his chart. The chart is immediately ordered from the medical records room but because of time constraints is not obtained and reviewed before the patient is rushed to surgery. The patient subsequently suffers anaphalaxis from the surgeon's latex gloves. No negligence occurred under the circumstances; it was reasonable for the surgeon to choose to focus on getting the patient to surgery rather than tracking down the chart (indeed, delaying surgery to locate the chart might have been negligent). Nevertheless, the event was avoidable. The best surgeon might have found a way to get the chart checked without delaying surgery. In addition, if the surgeon had instant access to an electronic medical records system, the latex allergy would have been ascertained.

The pool of patients who are avoidably injured includes all those who are negligently injured as well as patients whose injuries were avoidable

but not due to negligence. Overall, the size of this pool is estimated to be about twice as large as the group of negligently injured (Thomas et al. 1999). Elsewhere we have described this standard and how it could be used in a health court system (Kachalia et al. 2006).

Health courts would determine compensation using both a general definition of avoidability and lists of specific "accelerated-compensation events," or ACEs (Bovbjerg, Tancredi, and Gaylin 1991; Tancredi and Bovbjerg 1991). ACEs are injuries that are presumptively deemed avoidable based on strong *ex ante* determinations that they would not normally occur when optimal care was provided. The ACE lists would be developed by an expert consensus process, relying on the best available evidence (Tancredi 1974, 1977).

Events that matched the specifications and clinical circumstances of an item on an ACE list would be eligible for expedited compensation. Unless the insurer had grounds to believe that the presumption of avoidability was inapplicable in a particular case, the claim would be approved for compensation on the basis of the information in the claim form, with the insurer's investigation being limited to verifying that the description of the injury and surrounding circumstances was accurate.

Damages

Economic damages would be fully compensated in a health court demonstration, with three provisos. First, some kind of eligibility threshold—a minimum number of days of disability and/or a minimum amount of out-of-pocket expenses—should probably be imposed in order to control the number and costs of claims brought (Baker 2005; Studdert and Brennan 2001). For example, eligibility for compensation might begin when patients have lost four weeks of work time or incurred \$3,000 to \$4,000 in medical expenses. (Constitutional requirements in many states would require that claims below this threshold be allowed to proceed in tort, although the difficulty of finding an attorney willing to accept such cases may serve as a practical impediment to bringing them.) Second, payments would be made on a periodic basis, and awards that included a future-loss component could be reexamined in the future. Third, a collateral-source offset rule would be applied, meaning that compensation awards would not cover amounts collected from other sources, such as medical insurance. The rationale for this rule is, again, cost control.

The methods of valuing the different components of economic losses would be similar to those used in the tort system, except that the valuations would be made by an expert employed by the decision panel. Patients who received an offer of compensation from an insurer but were dissatisfied with the insurer's valuation of their case could appeal to the health court on the issue of damages.

Health courts would award limited noneconomic damages based on a sliding scale or schedule developed for this purpose (Bovbjerg, Sloan, and Blumstein 1989). The schedule would consist of a number of injury-severity tiers based on an existing injury-severity scale such as the National Association of Insurance Commissioners' nine-point disability scale (National Association of Insurance Commissioners 1980). Dollar value ranges (both floors and ceilings) would be assigned to each tier based on decision-science research about how the public values various utility losses and public deliberation about reasonable compensation. The adjudicator would select a value within the range depending on the specific facts of the case compared with those of other like cases (State of Washington Task Force on Noneconomic Damages 2005).

Are Health Courts Fair to Patients?

Health courts are attractive for a number of reasons, but before discussing them, we should ask whether a health court would adequately address the needs and rights of injured patients. Many features of the health court's design suggest that it would be not only procedurally fair but also more likely to result in a favorable outcome for an injured patient than the present system would be. Table 1 summarizes these features, several of which would ensure procedural due process, including notice and opt-out provisions, provisions for legal representation, and appeal rights. Expanded eligibility standards and ease of bringing claims would also increase patients' access to compensation relative to that of the tort system. Finally, the use of decision aids and damages schedules would improve the consistency of decision making and the horizontal and vertical equity of damages awards.

Advantages of Health Courts

Health courts promise several advantages over the tort system. First, compensation decisions would likely be faster and more reliable. The explicit decision aids, in the form of ACE lists and the database of previous

TABLE 1
Health Court Pilot Features Ensuring Equity and Due Process for Claimants

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- Representation by legal counsel is permitted but not necessary, making it easier for claimants with relatively low damages to bring claims.
 - The system encourages insurers to make rapid offers of compensation in meritorious cases. In the tort system, plaintiffs are disadvantaged by the superior ability of well-resourced defendants to withstand protracted litigation and its costs.
 - The pool of patients who are eligible for compensation is greatly expanded by moving from negligence to avoidability as the compensation standard.
 - Patients are given notice of the system and a meaningful opt-out right.
 - The use of decision aids, including information about previous cases, improves the consistency ("horizontal equity") of liability determinations and awards across similar cases.
 - Replacing flat caps on noneconomic damages with a sliding schedule that is sensitive to the severity of the claimant's injury improves "vertical equity" in awards (the notion that the size of the award should increase with the severity of the injury).
 - The system requires disclosure of adverse events and creates conditions that make this more likely.
 - Claimants can receive a full, fresh review of the case by the health court, with no deference given to the findings of the insurer panel.
 - Claimants have substantial appeal rights, including recourse to judicial appeal after administrative processes have been exhausted.
-

decisions, would improve the consistency of decision making across cases involving similar injuries. Aside from rarely applicable doctrines such as *res ipsa loquitur* (the notion that for some kinds of injuries, negligence can be presumed from the mere fact that the injury occurred), the tort system lacks any comparable mechanism for incorporating presumptions and precedent at the trial level. Nor does it provide any guidelines to juries for calculating damages. As a result, liability determinations tend to vary across seemingly similar cases (Studdert et al. 2006), as do damages (Bovbjerg, Sloan, and Blumstein 1989). Greater reliability would also reduce health care providers' uncertainty about what the law requires of them and insurers' uncertainty about their exposure, both of which are costly features of the current system. One empirical study suggests that up to half of all obstetrical claims could be resolved, for example, through the application of an ACE list (Bovbjerg, Tancredi, and Gaylin 1991).

Second, health courts would compensate a broader range of patients than the tort system does. The avoidability standard expands the eligibility for compensation to a wider group of patients than are eligible under the negligence standard. The relative ease of filing and processing claims in a health court system would encourage more of those who are eligible to bring their claims forward. Improving the capacity of the compensation system to serve the group it is intended to serve is perhaps the most important and obvious target for liability reform efforts (Baker 2005).

Third, a health court system presents greater possibilities for cost control than the tort system does. Although more claims would be filed, the average award would likely be considerably lower. More important, the size of the award could be controlled. Whether malpractice litigation costs currently exceed the socially optimal level is controversial (Baker 2005), but the desirability of being able to control the system's costs should not be. Only when we have such leverage can we ensure that the amount we spend on medical injury compensation matches social judgments about how much we should be spending. Controlling compensation costs is fairly difficult in the tort system, which is decentralized and in which compensation decisions are made without reference to guidelines or precedent. In a health court, policymakers could calibrate the schedule of noneconomic damages and/or eligibility levels for economic losses to reflect social expectations. Although detailed estimates of health court system costs are not yet available, existing modeling indicates that the system could compensate a much broader group of patients (at a more modest award level) than can the tort system at about the same cost, due in part to savings on administrative overhead costs (Studdert and Brennan 2001; Studdert, Mello, and Brennan 2005).

But perhaps the most important advantage of moving to health courts to address medical injury would be preventing injuries and promoting safety. Speed, accuracy, and efficiency are not new selling points of an administrative approach to medical injury compensation; they have fueled interest in this alternative for decades. Although these advantages have excited scholars and some policymakers, they have fallen short of rallying the level of political and public support needed to launch experiments (Studdert 2004).

Today, the new factor in the mix is patient safety. The public is concerned about medical error as never before, and among the usual chorus of criticism confronting the malpractice system is a new chord: how can

compensation for injuries be linked to preventing them? Patients who sue report that preventing similar events from happening again is an important motivation for their decision (Hickson et al. 1992; Vincent, Young, and Phillips 1994). Policymakers expect the same at a system level, and as we learn more about errors in medicine, we also find new possibilities for preventing them.

This linkage is, however, largely missing today in the tort environment. Although tort theory promises to prevent accidents, and patient safety has improved in important but isolated ways in response to malpractice litigation (Baker 2005; Hyman and Silver 2005), systematic deterrence of medical malpractice is elusive (Mello and Brennan 2002). Deterrence is most likely when health care providers understand what the standard of care is and that preventable deviations will lead to an economic sanction. Conversely, in the tort system, deterrence is undermined by the uncertainty surrounding the negligence standard, the fact that few instances of negligent injury to patients result in malpractice claims, and physicians' perception that litigation outcomes are often not related to the underlying merits of the case (Mello and Brennan 2002).

A health court would replace the ambiguous negligence standard with more explicit compensation criteria, such as ACEs. The use of evidence-based decision guidelines and precedent also should help reduce the incidence of liability determinations that do not match the underlying merits of the claim (Studdert et al. 2006). This improvement in the system's accuracy should clarify the deterrent signal to providers. By simplifying the claims process, a health court should also bring more patients injured by medical care into the compensation system, thereby increasing the likelihood that suboptimal care will signal to providers that care must be improved. In addition to its general effect on deterrence, a health court would have several specific safety-enhancing features.

Improving Patient Safety

The Culture of Safety and Disclosure

Since scientific studies of injuries to patients first began more than fifteen years ago and especially since the Institute of Medicine's report on medical error, *To Err Is Human* (Kohn, Corrigan, and Donaldson 2000), put safety squarely on the policy agenda in 2000, theorists and practitioners

have agreed that promoting a culture of safety in medicine requires being honest with patients about iatrogenic injuries and sharing information about injuries with systems that facilitate analysis and learning. In other industries involving complex, technology-based services that are prone to error and potential catastrophe, engineers and safety experts have sought to develop systems for open discussion of potential flaws and immediate reporting of poor outcomes. Among many other examples, the nuclear energy and aviation industries have emerged as the safety movement's favorites (Helmreich 2000).

Advocates for safety believe that this cultural development is as important as any other factor for preventing injury. They argue quite persuasively that every employee must consider safety to be his or her job and that this must be uppermost in each employee's mind. In the medical context, advocates also argue that patients should be enlisted in the effort (Entwistle, Mello, and Brennan 2005) and that honesty about potential problems will both promote overall discussion and reiterate to the professional that the patient's well-being is the first objective. Advocates also argue that reporting information about injuries to centralized reporting systems is crucial to building an evidence base for learning why errors occur and how they could be prevented.

The tort system does not foster this culture because the dominant paradigm in tort litigation is silence (Liang 2000). Being accused of negligence, which many doctors interpret as akin to being criminally culpable (Lawthers et al. 1992), induces a strong sense of guilt and professional blameworthiness (Hupert et al. 1996). As a result, many physicians are reluctant to share information about adverse events with either patients or reporting systems (Bovbjerg and Berenson 2005).

Classical risk management teaches physicians to console patients but never to admit responsibility or openly discuss errors or injuries. Given the complexity of most situations that cause injury and the unreliability of determining whether an error occurred, in some ways this is a rational approach. But it also has created a wall of silence surrounding poor outcomes (Gibson and Singh 2003). Communication with the patient is usually disrupted, or at least attenuated, by risk management. Moreover, physicians rarely share with their colleagues information that they learned from the encounter. Hence the malpractice case tends to be compared to a lightning strike as simply a random event not associated with quality. As such, the conventional wisdom asserts, it is best forgotten and certainly should not be discussed.

The negligence-based system of malpractice litigation cements and reinforces these features. The patient must allege negligence in order to obtain compensation, and even when physicians feel that an event could have been prevented, they rarely admit to negligence. Because informing the patient of the availability of compensation in tort would be tantamount to admitting negligence, it simply does not happen, given the acrimony associated with litigation and the professional and emotional burden borne by physicians who are sued. Similarly, physicians are concerned that reporting adverse events to reporting systems or peer-review mechanisms may trigger concerns about their competence or heighten their exposure to litigation (Liang 2000; Sato et al. 2005).

Due at least in part to the dissonance between the culture of tort and the culture of disclosure, regulatory initiatives to promote the disclosure and reporting of adverse events have not fared well. Even state reporting systems to which reporting is mandatory are believed to suffer from serious underreporting problems (Rosenthal, Riley, and Booth 2000), and survey evidence suggests that hospitals frequently do not comply with the JCAHO (Joint Commission on Accreditation of Healthcare Organizations) accreditation requirement that patients be notified when their care results in unanticipated outcomes (Lamb et al. 2003). Although very few studies have examined the issue (Hyman and Silver 2005), the notion that litigation fears are a major reason for this lack of transparency has great face validity and some empirical support (Lamb et al. 2003).

The promise of health courts, we believe, is to change these circumstances. Some scholars of medical malpractice question whether ameliorating the stress of liability alone would result in wider error reporting, noting that doctors were reticent about errors long before the rise of tort litigation in the 1960s and remain so in countries and settings where liability is not a major threat (Hyman and Silver 2004, 2005). The proclivity to conceal errors doubtless has multiple wellsprings, including not only legal fear but also ego, the human desire to avoid taking responsibility for bad outcomes, peer ostracism, reputational harm, fear that a report could trigger a disciplinary investigation, skepticism that it will lead to positive change, and the cultural norms of the medical profession (Morreim 2004; Sage 2004b). However, it is fair to say that liability pressure does not make it any easier for physicians to resist these influences. Some barriers to reporting and disclosure would remain in a health court system, but the environment for transparency would likely be markedly improved.

The improvement would arise from the move from the negligence standard to the less loaded notion of avoidability. Avoidability brings with it fewer moral connotations than negligence has; avoidable means suboptimal but not substandard. With the growth of the patient safety movement, physicians have become interested in the burgeoning literature on “systems problems” in health care and have accepted that avoidable injuries can happen in the hands of any physician or at any hospital even when no one is behaving negligently. Because involvement in an avoidable adverse event does not carry the same degree of stigma as negligence does, physicians would probably face fewer psychological barriers to disclosing it. Physicians should also (at least over time) feel assured that disclosure of an avoidable event is unlikely to lead to disciplinary action. Only a subset of avoidable events would involve negligence, and only a subset of negligent events would involve the kind of evidence of serious competence problems or misconduct that would trigger disciplinary proceedings.

A system that alleviates barriers to disclosing adverse events has the advantage of meshing with modern notions of medical ethics. Central to American medical ethics are the notions of altruistic dedication to the patient’s best interests and unceasing efforts to communicate honestly, providing the patient with the means to exercise autonomy in giving informed consent to therapy. A health court would facilitate practices that comport with physicians’ own sense of professionalism. The commitment to the patient’s well-being continues through appropriate compensation for a qualifying injury (Peterson and Brennan 1990). Respect for the patient’s autonomy comes from giving the patient full information about the occurrence of injury and its potential avoidability. In this sense, health courts promise reasonable integration with medical ethics, whereas traditional malpractice litigation certainly does not. Thus the potential for health courts to foster a culture of disclosure should provide a much-needed boost to the law’s compensation function and its safety-enhancing potential.

Safety Analysis at the Involved Hospital

Health courts also promise to boost the capacity of and incentives for hospitals to analyze and improve patient safety. The initial locus of learning from adverse events in a health court system would be the involved hospital. Whenever a claim was filed, root-cause analysis of the injury

would be conducted as a matter of course by the hospital and its insurer as part of the initial determination of whether to pay compensation. The insurer might convene a panel of reviewers, including its claims adjusters and medical experts from within and outside the hospital, or it might rely wholly or partly on the analysis of a hospital quality assurance committee.

Traditional morbidity and mortality rounds pursue a similar exercise—reviewing poor outcomes in order to develop insights about better care—but do not involve formal judgments about medical injury or avoidability. On the contrary, the transformation of an event into a malpractice claim usually removes it from scrutiny in morbidity and mortality rounds. Because of the shift from negligence to avoidability, health court claims should not have the same stigma, and discussion of them by clinical staff should be a priority.

Epidemiological research shows that avoidable injuries are fairly common (Brennan et al. 1991; Thomas et al. 2000). Some such injuries may not be substantial or instructive enough to warrant discussion at a morbidity and mortality conference, but within a health court system, all filed claims would receive some root-cause analysis. Following the insurer's determination on the claim, important cases could be referred (back) to existing quality assurance/risk management personnel (in a well-run hospital, these groups should never be segregated) for further discussion with clinical staff. It would be desirable to require hospitals to develop such referral mechanisms as a matter of law or as a contractual condition of participation in a health court demonstration.

The health court also is designed to create a financial incentive for the hospital to conduct further analysis. Eventually, if not initially, the system should be financed by liability insurance premiums rated according to experience. The hospital's or care unit's premiums would be indexed to the frequency of its avoidable injuries. Hence there would be strong economic incentives, similar to those in worker's compensation, for hospitals to understand the causes of avoidable injury and try to prevent recurrences. Experience suggests that hospitals that are capable of significant self-study through root-cause analysis also are able to change the care processes that might have created the conditions for the avoidable event. In summary, a health court would likely increase both the frequency and quality of the hospital's safety analyses and augment incentives to make improvements based on their findings.

Safety Activities at the State Level

A second component of safety improvement in a health court system would be enlightened oversight of hospitals' efforts. To date, the regulation of patient safety has been fragmented and not particularly rational (Mello, Kelly, and Brennan 2005), but it could add significant value to what hospitals could do on their own. Health courts, in particular, would be good engines for patient safety research and regulation.

The health court would serve as a centralized repository for claims information. Hospitals and their insurers would transmit claims information to the court when a claim is filed and when an initial decision has been made in the case. The court itself would add to this information base in cases in which the patient requested a review of the insurer's decision and an independent determination of avoidability or damages was made.

Although it may appear trivial, the very existence of this centralized database of claims represents an enormous contribution to patient safety. Patient safety researchers have long recognized the value of malpractice claims information in understanding the causes of serious adverse events but have lamented its lack of availability. The only available national database, the National Practitioner Data Bank (NPDB), does not contain detailed information about injuries and includes only those claims that received compensation. A handful of states require liability insurers to report some basic information about all closed claims to a statewide database. But only a few of these states are willing to share information with external researchers. Individual liability insurers hold detailed claims data, of course, but seldom share them. The health court presents a natural repository for a comprehensive, centralized, standardized database that could collect virtually any piece of information that the health court deemed important to patient safety analysis.

In addition to processing claims for compensation, the health court would be connected to an office responsible for maintaining the database and coordinating analyses of the data in order to improve patient safety. To be fully integrated, this office could be a division of the health court. In some states, constitutional separation-of-powers considerations may mean that the health court would be in the judicial branch and the patient safety office would be in the department of public health. The key feature is that the offices would be connected by a shared database of claims information, which the patient safety office would analyze.

If the offices were separated, dedicated staffers in the health court would be responsible for maintaining the database. For example, they would conduct data quality checks to ensure that the data fields were being filled out comprehensively and correctly. They also would regularly consult with the patient safety office to decide how to make the database more useful for safety research—for instance, adding new fields that have become useful in patient safety research, updating typologies of injuries and contributing factors to reflect the state of patient safety research, and maximizing the database's search capabilities. The database would also serve as a source of precedent for health court adjudicators, making decisions more reliable over time. To ensure that the database is useful for decisions about compensation, staffers would gather feedback from health court judges and medical experts and adjust the data fields and search features as needed.

The patient safety office would be responsible for compiling and periodically publishing aggregated, deidentified descriptive statistics on major issues of interest to hospitals, their insurers, regulators, the patient safety community, and the public. Examples are types and rates of injuries reported, percentages of claims compensated within particular clinical categories, lists of the top injuries in terms of severity and prevalence, and characteristics of claimants. The patient safety office would also compile hospital-level descriptive statistics on claims volume, costs, proportion of injuries judged avoidable, principal injury types, principal clinical areas from which injuries come, and other issues of interest to hospitals and feed this information back to interested hospitals. At a hospital's request, the health court could compare a particular facility with all other facilities with similar characteristics in order to facilitate institutional benchmarking, targeted improvement activities in specific areas, and learning from organizations with lower rates of injury.

Finally, the patient safety office would coordinate more detailed analyses of patient safety problems and potential solutions (i.e., controlled analyses of factors and conditions associated with preventable adverse events). The patient safety office could do this either internally or, better, in partnership with external research groups. External researchers would bring special expertise and perhaps additional financial resources for patient safety research. Research partnerships could be arranged by grant, contract, or a simple data use agreement.

One goal of this research would be to conduct rigorous studies of variations in claims rates across institutions and geographic areas and

to identify factors associated with high and low rates. An even more important goal would be to examine the data regarding contributing factors to better understand why the injuries occurred and what could have prevented them. The results of these analyses, with specific identifiers appropriately concealed, would periodically be fed back to hospitals and the public.

The health court's patient safety office might also make publicly available deidentified versions of the root-cause analyses conducted by hospitals in particularly interesting cases. These analyses might identify potentially important causes of avoidable compensable events, and physicians and hospitals could learn from their colleagues' experiences and findings. When the involved hospital found a solution, its widespread use would be encouraged. The office could facilitate this learning and information sharing by providing a mechanism for disseminating the information.

The warehousing and analytical functions described for the health court and its affiliated patient safety office are similar to what is contemplated for "patient safety organizations" (PSOs) in the recently passed federal patient safety legislation (U.S. Senate 2005b). Therefore it may be desirable to credential the office as a PSO, as this designation would extend federal confidentiality protections to the data. However, the legislation envisions an organization analyzing patient safety issues in the harsh reality of the existing tort environment, not a health court system. Given the health court's emphasis on transparency and the diminished need for confidentiality in a system that does not revolve around blame, it may be desirable for the health court to retain greater flexibility regarding the confidentiality of the data it collects.

Patient Safety Activities in Foreign Administrative Compensation Systems

The experience of other countries suggests that the patient safety activities we have described are feasible for a health court. Three foreign models—New Zealand, Denmark, and Sweden—that we recently investigated through key informant interviews demonstrate the potential for administrative compensation schemes to generate and use data for patient safety improvement in similar ways. They also illustrate the dramatic contrast between what can be achieved in a centralized

administrative system and what can be done in the current tort system (see table 2).

Although historically the New Zealand Accident Compensation Corporation (ACC) has not often used its claims data for patient safety improvement, it recently underwent significant change. The ACC now is strongly oriented toward patient safety and has implemented a new, more comprehensive database to collect and analyze claims data for purposes of safety improvement. Claims reviewers extract information about the nature of the adverse event, the surrounding clinical circumstances, and how the accident could have been avoided. These data are entered into the database using standard taxonomies as well as free-text fields, which allow for detailed explanations.

The database has a separate component that an analyst from the patient safety team within the ACC (not the claim reviewer) fills out. Drawing on his or her knowledge of previous cases, this analyst scores the severity and rarity of the each injury and, based on this score, assigns each event a "safety assessment code" from 1 to 4, indicating the priority of that kind of injury for follow-up by the safety improvement team. The agency plans to periodically review these codes to identify those types of injuries that merit immediate action (particularly when a solution is readily available), those that should be monitored, and those for which research is needed. When a clearly effective and low-cost solution is found, the ACC may try to persuade the government to order providers to use it.

The ACC's investigation of particular types of injuries typically includes detailed analyses of similar events across institutions and recommendations to hospitals about preventing such injuries. These briefings may be targeted to particular hospitals that the safety team has identified as having particularly high rates of claims for that kind of injury. Hospitals may also request aggregated data on claims from their facility. (The public cannot access hospital-specific information.)

The Danish Patient Insurance Association (PIA) also maintains a comprehensive database that contains a range of data fields essential to patient safety researchers. Rather than conducting much patient safety analysis itself, the PIA tends to rely on partnerships with academic researchers. External researchers may apply for permission to study the claims database and publish their findings in scholarly journals, with several such analyses having been published to date.

In the Swedish system, the patient insurance company (LOF) conducts its own descriptive analyses of claims data and disseminates its findings

TABLE 2
Relationship of Injury Compensation Systems to Patient Safety Initiatives and Disciplinary Processes in Four Countries

	United States' Tort System	New Zealand's Accident Compensation (ACC) ^a	Sweden's Regions Patient Injury Insurance (LOF)	Denmark's Patient Insurance Association (PIA)
Use of compensation decisions as data for safety research	No centralized repository for information on all filed claims. Academic researchers have made some use of closed-claim databases, but data fields and access are limited.	Details of all claims are logged in a database. Hospitals may request their own claims data for purposes of analysis; otherwise, data are not externally accessible.	Details of all claims are logged in a database. Data are available to external researchers but have seldom been updated.	Details of all claims are logged in a database. Data are available to external researchers. PIA maintains copies of associated medical records to support detailed studies.
Safety analyses performed by compensation system	None.	ACC has a new patient safety division to identify priority areas for safety improvement and to perform safety analyses using the database. ACC writes reports and distributes them to hospitals. Injury prevention is now viewed as the ACC's primary goal.	LOF analyzes claims data and prepares presentations of patient safety issues for hospitals and regions. LOF sends to hospitals facility-level comparisons of claims rates, injury types, etc. LOF does no root-cause analysis but gives hospitals data and economic incentives to do so. It also permits researchers to access the data.	PIA does no safety analysis itself but has joined external researchers to publish several safety-related articles in scholarly journals.

Information sharing with patient safety regulators	None.	If a safety threat is identified, ACC must report it to the relevant regulatory authority. When ACC identifies a clearly effective and low-cost safety improvement, it may ask the government to order providers to adopt it.	None.	PIA shares information about drug-related claims with the national regulatory body.
Information sharing with disciplinary processes	No reports are made directly to disciplinary bodies. Insurers report paid claims to the National Practitioner Data Bank, and these data are accessible to hospital credentialing committees and licensure boards.	If ACC identifies a provider as a safety threat, it must report the provider to the Registration Authority or other disciplinary body.	LOF does not share information with disciplinary processes.	None. Firewall between PIA and the Patient Complaint Board is motivated by the desire to encourage physicians to report and disclose adverse events.

Note: ^aCurrent practice under reform legislation passed in 2005. Before 2005, there was more frequent reporting to disciplinary bodies and little data aggregation and patient safety analysis.

on leading causes of injury to hospitals through written briefings and live presentations. Hospital-specific comparisons are provided so that hospitals can see where they are situated in terms of claims rates, claim outcomes, costs, and kinds of injuries. LOF does not perform root-cause analyses itself. Rather, it supplies hospitals with the data, provides instruction, and strongly encourages the analyses. Finally, LOF also shares data with external patient safety researchers.

In summary, patient safety research can and does take place in foreign administrative compensation systems and there is growing recognition of the value of compensation system databases as an information source for such research. A health court in the United States could use these examples and leverage claims information to learn about the circumstances that contribute to errors and preventable adverse events.

Prospects for a National Adverse Event Database

A third approach to safety that could be pursued in a health court system, if the system were to spread over a number of jurisdictions, is to develop a national database of avoidable adverse events. Although health courts are likely to be state enterprises, their databases could be integrated into a national dataset over time. Existing work on standardizing data fields and typologies in patient safety databases (Aspden et al. 2004) could be readily applied to this project. A federal program, perhaps established under the auspices of the Agency for Healthcare Research and Quality (AHRQ), would be the best mechanism for collecting this information.

Two problems frustrate attempts to create a national database of claims under the current liability system. One is that malpractice claims filed under the negligence standard represent a skewed sample of all avoidable injuries. They probably are more serious than the average avoidable event, and for obvious reasons they lean toward the negligence side of the spectrum. Hence they provide only a relatively small view of the entire universe of avoidable injuries. Second, the current liability system is so fragmented that aggregating claims information at the level of detail required to support safety analyses is a practical impossibility. Scores of insurers collect and store data in very different ways. Safety studies based on pooled data require researchers to go back to the original medical

records and each insurer's claims database and translate the data into a standard format (Studdert et al. 2006). In a health court, however, this information would already be standardized and centralized.

Epidemiological analyses of medical-legal claims from multiple jurisdictions are promising mechanisms for identifying causes of medical injury (Gandhi et al. 2006; Rogers et al. 2006). Aggregating information across a large number of cases would permit researchers to focus on relatively rare but unacceptable events (Gawande et al. 2003) and allow them to test various hypotheses with regard to prevention. We have begun some of these studies already, applying both safety engineering and epidemiological methods to analyses of malpractice claims (Studdert et al. 2006).

What kind of information might we find from this approach? Consider that a data bank of this sort might contain information about perhaps as many as five thousand to six thousand avoidable infections. With human factors and clinical information derived from each, researchers would be well placed to identify risk factors associated with specific infections, and this information could be very helpful to the development of a "basic science" of injury prevention (Brennan et al. 2005).

We therefore believe that fostering a culture of disclosure, encouraging root-cause analyses by both hospitals and insurers, compiling the results of these analyses and additional findings by the health court in a database maintained by the state and shared with qualified researchers, and eventually developing a national database of avoidable injuries would constitute the primary patient safety benefits of moving to a health court scheme. This appears to be a much more rational approach to avoiding medical errors than any aspects of the current tort system. When combined with experience rating at the level of the hospital, prevention signals would likely be much stronger in a health court scheme than they are under tort regimes.

Relationship to Disciplinary Authorities

Central to discussions of patient safety under a health court system is the question of the health court's relationship to other processes designed to protect patients from substandard care. The ability of disciplinary entities such as licensure boards, hospital accreditors, and departments of public health to use a health court's information about avoidable injuries is controversial. On the one hand, a culture of honesty, in which avoidable

events are disclosed to patients, is essential, and providing assurances that such reports will not be used against physicians in disciplinary action promotes transparency.

The public, however, continues to worry about the “bad apple” doctor or hospital, and some might argue that disciplinary authorities and other regulators should have access to the health court’s data. Similar pressures inspired the original design of the National Practitioner Data Bank (NPDB). By the mid-1980s, regulators realized that the decentralized, state-based system of physician licensure and discipline allowed physicians with shoddy track records in certain states to start afresh in different states. The 1986 Health Care Quality Improvement Act required that all payments for malpractice claims, as well as any licensure procedures or changes in staff privileges in a hospital, be reported to the NPDB. Before granting clinical privileges to a physician, all hospitals and health plans must query the NPDB to determine whether the physician has been sanctioned elsewhere.

This history raises the question of whether a health court should follow a similar approach, making information on paid claims available to licensure and disciplinary authorities. In addition, should such information be reported to the state department of public health, particularly if it involves hospital care? Should it be reported to medical specialty boards? Finally, should paid claims in a health court trigger a report to the NPDB?

The experience of other countries suggests that the answers to these questions should generally be no. Historically, the approach in New Zealand’s injury compensation scheme was to forward some information from the compensation system to the disciplinary process (table 2). ACC reviewers judged whether claims involved a medical error—a standard that hews closely to negligence—and reported to the office of the Health and Disability Commissioner (HDC) all those that did. The HDC, which is responsible for responding to patients’ complaints about medical providers, would decide whether to prosecute cases involving serious deviations from accepted standards of conduct before a tribunal (the tribunal could impose practice restrictions, censure, fines, and license suspensions, and award money damages to patients).

In 2005 this information-sharing arrangement changed. Under new reforms, the ACC no longer makes medical error determinations; rather, injuries are compensated if they are causally connected to medical treatment, whether or not the injury is due to an error. Also, the ACC no longer

routinely reports to the HDC. These changes were adopted primarily out of concern that the stigma and threat of disciplinary action surrounding determinations of medical error were discouraging physicians from cooperating with patients and the ACC in the claiming process.

How much information will be shared in the future is not clear: the ACC says that its role will be limited to telling claimants that they can file a complaint with the commissioner, but the HDC believes it will continue to be able to request that the ACC send over its file on a particular case to aid in the HDC's own investigations. In summary, New Zealand's approach has traditionally involved a permeable wall between the compensation system and disciplinary processes, but it recently turned away from this approach in order to make physicians more willing to help patients obtain compensation.

The Danish and Swedish systems have never permitted information to be shared with disciplinary processes. Instead, discipline and complaints are handled by a separate body through a separate complaints process, with a firewall between that process and the compensation system. This wall is justified by the perceived need to encourage physicians to make patients aware of their right to obtain compensation and to help them in that process. Compensation system administrators in those countries strongly believe that the success of their systems hinges on physicians' willingness to be active participants in it and that this willingness cannot coexist with the threat of disciplinary action in response to their reports.

The experience of these countries demonstrates the importance of sensitively handling information about adverse events in a health court system. Physicians will hesitate to disclose information if they believe that avoidable injuries reported to patients could result in a disciplinary proceeding. Moreover, it is important to remember that paid claims in the context of a health court will not always or even usually reflect substandard care. Instead, the health court is designed to compensate avoidable injuries, and avoidable injuries may occur in the absence of negligence. As a result, they should not necessarily be of interest to, or trigger action by, disciplinary bodies, nor should they ordinarily result in a report to the NPDB.

Hospitals, conversely, would receive extensive feedback from the health court about their claims. This information would be provided with patient- and physician-level identifiers to enable hospitals to pursue their own investigations. Hospitals, wielding their credentialing

authority, would be the key avenue of redress for recurrent injuries associated with “bad apple” doctors or dangerous conditions.

For cases that appear to involve egregious provider misconduct, the health court would exhort the hospital to investigate the individual provider and suggest that it report to external disciplinary authorities and the NPDB. In extreme cases, the health court could have the right to make its own report to the NPDB or the state department of health or licensure board, which then could follow up with the hospital to determine what corrective action had been taken. But because the intent of this system is to keep compensation decisions separate from decisions of responsibility and blame, disclosure to that regulatory agency should be permitted only in those circumstances in which the danger to patient safety is clear, ongoing, and significant.

Hospitals’ investigations of particular injuries or patterns of injuries reported out of the health court system might generate concerns that would merit a restriction or suspension of a physician’s privileges. Hospitals would retain their current discretion to take such action. The JCAHO requires that hospitals continually analyze quality in order for physicians to maintain their privileges. This investigation qualifies for peer review protection. Any restrictions or suspensions must be reported to the NPDB and, in many states, also to the state’s department of public health and the licensure board for physicians, but only as part of the hospital’s existing set of responsibilities, not as part of the health court scheme.

Thus the health court system, focusing on compensation, transparency, and safety improvement, is designed to function separately from disciplinary activity. The rationale is to avoid polluting the core elements of the system, compensation and open discussion, with the threat of discipline. However, by providing detailed information to hospitals, the health court could support and improve hospitals’ ability to meet their existing responsibility to identify and address physicians’ competence and quality problems. This structure strikes a compromise between transparency and the human tendency to avoid discipline.

Some people may question hospitals’ willingness and ability to police physicians’ competence in the manner we have described and argue that disciplinary boards should not be hampered by restrictions on claims information. In fact, both hospitals and disciplinary boards have a poor historical record of sanctioning low-quality physicians. However, there are at least two reasons to prefer hospitals to disciplinary boards for most

quality problems uncovered in a health court system. First, as discussed earlier, the need to maintain physicians' participation in the compensation system is critical, and other countries' experience suggests that it will not occur if compensation processes are perceived to be entangled with discipline. Second, since the release of the Institute of Medicine's report on medical errors, hospitals have demonstrated an unprecedented commitment to patient safety. Although this commitment was previously directed primarily toward the detection and study of adverse events and the design of safety-enhancing interventions, the conditions are ripe for hospitals to become more active in dealing with physicians' competence issues. Oversight by the JCAHO and state regulatory authorities is important, but hospitals can and should be encouraged to do more in this area.

Conclusions

Health court proposals continue to be viewed as radical and to arouse skepticism from many stakeholder groups. Plaintiffs' attorneys wonder whether the tort system's corrective-justice function can be served equally well by an alternative that does not lay blame and shame on individual physicians. They and many consumer groups lodge fairness objections to the notion that noneconomic damages should be limited. Liability insurers fear the potential impact on the volume of claims and the cost of expanding compensation to include all avoidable injuries.

These doubts arise from these groups' commitment to safeguarding patient safety and well-being, preserving access to fair compensation, and keeping costs at a manageable level. These values and goals are important to a compensation system, and it is reasonable to ask for empirical evidence that they will not be compromised by moving to health courts. Small-scale demonstration projects of health courts are a means of determining, at relatively low risk, whether the asserted benefits of health courts will materialize and whether these values will be honored.

We believe that they will and, in particular, that the system will have major advantages for patient safety. Alleviating the stigma and adversarialism of dispute resolution in tort would likely contribute significantly to building a safety culture. A health court system could also provide new and important structural mechanisms for collecting, analyzing, and disseminating information about avoidable injuries.

Health courts hold the promise of deterring injuries in a way that tort law never can. While it will continue to be important to seek market-based and regulatory mechanisms of improving and monitoring patient safety rather than relying principally on the liability system (Hyman and Silver 2005), the liability system could help improve safety more constructively than it has in the past (Sage 2004a). In weighing proposals for health courts, policymakers will continue to debate cost, fairness, and feasibility issues. But when it comes to patient safety, the scale is tipped heavily in favor of a new approach.

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